



DEPARTMENT OF PUBLIC WORKS,  
Michael Fowler, P.E., Director  
Thomas A. Carrier, Deputy Director

PW20-195  
October 27, 2021

US Environmental Protection Agency  
Office of Ecosystem Protection  
5 Post Office Square – Suite 100 (OEP06-03)  
Boston, MA 02109-3912  
Attention: Justin Pimpare

Re: Town of Derry, New Hampshire-WWTF  
NPDES Permit No. NH0100056  
2021 Industrial Pretreatment Annual Report

To Whom It May Concern:

The Town of Derry is herein submitting its Annual Pretreatment Program Report. This report is in accordance with the Town of Derry WWTF's NPDES permit effective March 1, 2011.

Any questions regarding the contents of this report or the Town's Industrial Pretreatment Program in general may be directed to:

Thomas A. Carrier, Deputy Director  
Derry NH Department of Public Works – Water & Wastewater Divisions  
14 Manning Street  
Derry, NH 03038  
Tel: 603-432-6144 Ext. 5456, Fax: 603-432-6130  
Email: [tomcarrier@derrynh.org](mailto:tomcarrier@derrynh.org)

I have personally examined and am familiar with the information submitted in this report and its attachments and believe to the best of my knowledge that the information submitted is true, accurate and complete.

Date: October 27, 2021

Thomas A. Carrier, Deputy Director of Public Works  
Town of Derry, NH

cc: David Caron, Town Administrator  
Michael Fowler, P.E. DPW Director  
Will Peterson, Chief WWTP Operator  
Craig Durrett, Environmental Coordinator  
New Hampshire Department of Environmental Services (NHDES)  
Water Division  
Wastewater Engineering Bureau  
29 Hazen Drive, PO Box 95  
Concord, NH 03302-0095



Town of Derry, NH Industrial Pretreatment Program  
2021 Annual Report

**Section 1. Updated list of Industrial Users**

There are no categorical industrial users.

**Significant Industrial Users:**

▪ Liquid Blue Inc., 6 Linlew Drive, Derry, NH: T-Shirt Printing	
Compliance with baseline monitoring requirements for newly promulgated industries:	N/A
Compliance with reporting requirements for newly promulgated industries:	N/A
Compliance with periodic (semi-annual) monitoring reporting requirements:	Yes
Compliance with categorical standards:	Yes
Compliance with Local Limits:	Yes

Industries that are sampled periodically include:

▪ DOIRE Distilling & Daydream Brewing, LLC, 1 ½ East Broadway Derry, NH: Distillery & Brewery	
Compliance with baseline monitoring requirements for newly promulgated industries:	N/A
Compliance with reporting requirements for newly promulgated industries:	N/A
Compliance with periodic (semi-annual) monitoring reporting requirements:	N/A
Compliance with categorical standards:	N/A
Compliance with Local Limits:	Yes
▪ From the Barrell Brewing Company, 1 Corporate Park Drive Unit 16 Derry, NH: Brewery	
Compliance with baseline monitoring requirements for newly promulgated industries:	N/A
Compliance with reporting requirements for newly promulgated industries:	N/A
Compliance with periodic (semi-annual) monitoring reporting requirements:	N/A
Compliance with categorical standards:	N/A
Compliance with Local Limits:	Yes
▪ Sanmina Corporation, 7 Manchester Road, Derry, NH: Groundwater Remediation	
Compliance with baseline monitoring requirements for newly promulgated industries:	N/A
Compliance with reporting requirements for newly promulgated industries:	N/A
Compliance with periodic (semi-annual) monitoring reporting requirements:	Yes
Compliance with categorical standards:	N/A
Compliance with Local Limits:	Yes
▪ Parkland Hospital, 1 Parkland Drive, Derry, NH: X Ray Development	
Compliance with baseline monitoring requirements for newly promulgated industries:	N/A
Compliance with reporting requirements for newly promulgated industries:	N/A
Compliance with periodic (semi-annual) monitoring reporting requirements:	Yes
Compliance with categorical standards:	N/A
Compliance with Local Limits:	Yes

▪ **Kelsen Brewing Company, LLC, 80 North High St. U3, Derry, NH: Brewery**  
 Compliance with baseline monitoring requirements for newly promulgated industries: N/A  
 Compliance with reporting requirements for newly promulgated industries: N/A  
 Compliance with periodic (semi-annual) monitoring reporting requirements: N/A  
 Compliance with categorical standards: N/A  
 Compliance with Local Limits: Yes

▪ **Rockingham Brewing Company, 1 Corporate Park Dr. U1, Derry, NH: Brewery**  
 Compliance with baseline monitoring requirements for newly promulgated industries: N/A  
 Compliance with reporting requirements for newly promulgated industries: N/A  
 Compliance with periodic (semi-annual) monitoring reporting requirements: N/A  
 Compliance with categorical standards: N/A  
 Compliance with Local Limits: Yes

▪ **Tri-K Industries, Inc. 20 A Street, Derry, NH: Cosmetics Raw Materials Manufacturing**  
 Compliance with baseline monitoring requirements for newly promulgated industries: No  
 Compliance with reporting requirements for newly promulgated industries: N/A  
 Compliance with periodic (semi-annual) monitoring reporting requirements: Yes  
 Compliance with categorical standards: N/A  
 Compliance with Local Limits: Yes

▪ **Royal T Carwash, 20 Folsom Road, Derry, NH: Carwash**  
 Compliance with baseline monitoring requirements for newly promulgated industries: N/A  
 Compliance with reporting requirements for newly promulgated industries: N/A  
 Compliance with periodic (semi-annual) monitoring reporting requirements: N/A  
 Compliance with categorical standards: N/A  
 Compliance with Local Limits: Yes

▪ **Town of Londonderry, NH Transfer Lane, Derry, NH**  
 Compliance with baseline monitoring requirements for newly promulgated industries: N/A  
 Compliance with reporting requirements for newly promulgated industries: N/A  
 Compliance with periodic (semi-annual) monitoring reporting requirements: N/A  
 Compliance with categorical standards: N/A  
 Compliance with Local Limits: Yes

# Town of Derry, NH Wastewater Treatment Plant Pretreatment Report

## Summary Sheet September 1, 2020 to August 31, 2021

POTW NAME	Town of Derry, NH WWTP	
NPDES Permit #:	NH0100056	
Pretreatment Report Period Start Date:	September 1, 2020	
Pretreatment Report Period End Date:	August 31, 2021	
# of Significant Industrial Users (SIUs):	1	
# of SIUs Without Control Mechanisms:	0	
# of SIUs Not Inspected:	0	
# of SIUs not Sampled:	0	
# of SIUs in Significant noncompliance (SNC) with Pretreatment Standards:	0	
# of SIUs in SNC with Reporting Requirements:	0	
# of SIUs in SNC with Pretreatment Compliance Schedule:	0	
# of SIUs in SNC Published in Newspaper:	0	
# of SIUs with Compliance Schedules:	0	
# of Violation Notices Issued to SIUs:	0	
# of Administrative Orders Issued to SIUs:	0	
# of Civil Suits Filed Against SIUs:	0	
# of Criminal Suits Filed Against SIUs:	0	
# of Categorical Users (CIUs):	1	
# of CIUs in SNC:	0	
<u>Penalties:</u>		
Total Dollar Amount of Penalties Collected:	\$0.00	
# of IUs from Which Penalties have Been Collected:	0	



## Local Limits

Date of Most Recent Technical  
Evaluation of Local Limits:  
Date of Most Recent Adoption of  
Technically Based Local Limits:

2011

1993

The Town of Derry, NH WWTP local limits were last approved by US EPA in 1993 and incorporated into the Code of the Town of Derry- Sewer Use Ordinance. The local limits were last evaluated in 2011 as required by the Town's NPDES permit. The Town has determined that the current local limits are sufficient.

The Derry WWTP is not under any Federal or State compliance schedule to revise its local limits.

Pollutant	Limit (mg/l)	MAHL (lb/day)
Chromium	0.7068	
Cyanide	0.084	
Lead	0.264	
Nickel	0.345	
Selenium	0.0348	
Zinc	0.8358	
Arsenic		0.228
Copper		7.784
Silver		1.0271

## PART II COMPLIANCE STATUS

Industrial User Permit No.	Industrial User	Self- Monitoring Reports Received/Date Received	Date of Last Report	Compliance With Local/EPA Limits	Industrial Permit Expiration Date
001C	Sanmina Corporation	Yes	29-Oct-21	Yes/N/A	30-Oct-23
002	Liquid Blue	Yes	2-Sep-21	Yes/N/A	31-Oct-22
003	Kelsen Brewery	N/A	N/A	Yes/N/A	31-Oct-24
004	Parkland Hospital	N/A	N/A	Yes/N/A	N/A
005	Doire Distilling	N/A	N/A	Yes/N/A	14-May-23
006	Rockingham Brewing	N/A	N/A	Yes/N/A	31-Oct-24
007	From the Barrel Brewing	N/A	N/A	Yes/N/A	4-Jul-23
009	Tri K Industries	Yes	15-Sep-21	Yes/N/A	31-Oct-23

### POTW Sampling Dates

8/24/21, 8/10/21, 5/5/21, 5/6/21, 1/26/21, 11/16/20, 11/18/20

## **Town of Derry, NH Industrial Pretreatment Program Annual Report 2020 - 2021**

### **PART III Compliance and Enforcement Activity:**

#### **A. ADMINISTRATIVE ORDERS:**

☐ administrative orders were issued during this reporting period.

#### **B. LETTERS OF VIOLATION:**

☐ letters of violation were issued this reporting period.

#### **C. COMPLIANCE SCHEDULES:**

☐ compliance schedules were issued during this reporting period.

#### **D. CIVIL SUITS**

☐ civil suits were filed during this reporting period.

#### **E. CRIMINAL SUITS**

☐ criminal suits were filed during this reporting period.

#### **F. OTHER ENFORCEMENT ACTIVITY**

No other enforcement activity was taken during this reporting period.

### **PART IV LISTING OF SIGNIFICANT NONCOMPLIANCE:**

☐ SIUs were in significant noncompliance for this reporting period.



October 29, 2021

## **Town of Derry, NH Industrial Pretreatment Program (IPP) 2020-2021 Annual Report**

### **Summary of Program Effectiveness:**

The objective of the Town of Derry IPP program continues to be to ensure that the wastewater discharged into its collection system, treatment facility and receiving waters does not adversely impact the collection system or Facility's performance or operation, compromise the integrity of the facilities, harm the environment, or threaten worker safety.

As of this reporting period, Liquid Blue, one of Derry's existing Industrial User Dischargers is classified as a Categorical significant industrial user, As a tee-shirt screen printing facility, they are classified as a fabric finisher under Part 410, Subpart E.

Influent monitoring of the Town's POTW as well as industrial discharge monitoring indicates that the industrial users do not pose a concern for pass through or interference at Derry's facility. Derry's average effluent discharge for this reporting period is 1.7 MGD which is about 56% of the WWTP's current treatment capacity.

Derry last updated its Sewer Use Ordinance in 2019 to address updates to its IPP. Derry continues as control authority for its Industrial Pretreatment Program and to maintain its program implementation.

New construction and change of property use continue to be monitored through the Town Planning Board's technical review committee and online building permit approval system which require that all new development, including expansion, altering or change of use be reviewed by the Department of Public Works. Such review considers, among other issues, the impact of any additional wastewater flows or changes in the characteristics of any wastewater discharge. The Wastewater Division has approval authority of any new development or building modifications to facilities connected the Town's municipal sewer collection system which requires a building or plumbing permit. This serves as an added check.

In 2021 Derry approved a new Intermunicipal Agreement (IMA) with the Town of Londonderry for their discharge of wastewater to the Derry WWTP. The IMA allocates 0.5 MGD to Londonderry. Derry monitors the flow coming from Londonderry. Londonderry is required under the IMA to administer its own approved Industrial Pretreatment Program.

Continued monitoring of the Derry WWTP's influent and effluent wastewater flows, as well as its NPDES monitoring, serve as a means of assessment of the Town's control of its system's wastewater discharges.



The Town continues to maintain adequate funding to conduct the necessary monitoring. \$10,000 was expended on analytical services for this reporting period. The Town's Environmental Engineer oversees the sampling and analytical assessment the Town's industrial users.

Derry's NPDES permit expired March 2016. Derry has submitted its permit renewal application to EPA and NH DES and continue to await comments. There were no significant changes to monitoring and reporting requirements or pollutant limits.

Respectfully,

A handwritten signature in black ink, appearing to read 'T. Carrier', followed by a long horizontal line.

Thomas A. Carrier

Deputy Director

Derry Department of Public Works: Water and Wastewater Divisions

## PART VI WASTEWATER TREATMENT PLANT MONITORING

Parameter	Units	11/16/2020	1/26/2021	5/5/2021	8/10/2021	Activated Sludge Inhibitory Concentration	11/16/2020	1/26/2021	5/5/2021	8/10/2021	NH Stream Criteria
		Influent	Influent	Influent	Influent		Effluent	Effluent	Effluent	Effluent	
Flow*	MGD	1.15	1.8	1.76	1.84		1.33	1.6	1.98	1.70	
Aluminum	mg/l	0.190	0.180	0.2	0.079	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	0.087
Antimony	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	
Arsenic	mg/l	0.0014	ND (0.001)	0.0011	0.0016	0.1	0.0012	ND (0.001)	ND (0.001)	0.0017	0.19
Barium	mg/l	0.031		0.053			0.012		0.02		
Beryllium	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	
Cadmium	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	
Chromium	mg/l	0.0010	0.0019	0.0015	ND (0.001)	1	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.067
Copper	mg/l	0.052	0.037	0.035	0.028	1	0.013	0.0083	0.0076	0.0062	0.0035
Lead	mg/l	0.0017	0.0014	0.001	ND (0.001)	0.1	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00055
Mercury	mg/l	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	0.1	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	0.000012
Molybdenum	mg/l	ND (0.001)	ND (0.001)	0.0011	ND (0.001)		0.001	ND (0.0001)	0.003	0.002	
Nickel	mg/l	0.0035	0.0036	0.0036	0.0032	1	0.0043	0.0041	0.0037	0.0038	0.049
Silver	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.25	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00012
Selenium	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	N/A	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.005
Thallium	mg/l	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	
Zinc	mg/l	0.12	0.089	0.1	0.075	0.3	0.044	0.04	0.032	0.018	0.033
Cyanide	mg/l	0.026	0.024	ND (0.02)	ND (0.02)	0.1	0.02	0.02	ND (0.02)	ND (0.02)	0.0052
Phenols	mg/l	0.063	0.053	ND (0.05)	0.042	50	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.015)	2.56

### 48 Hour Acute Toxicity - LC 50:

Parameter	Units	Effluent Sample Date	Effluent Sample Date
		9/1/2020	3/3/2021
Flow	MGD	1.21	1.82
Ceriodaphnia dubia	%	>100	>100
Pimephales promelas	%	<100	>100
Aluminum	mg/l	<0.02	0.06
Cadmium	mg/l	<0.0001	<0.0001
Chromium	mg/l	<0.001	<0.01
Copper	mg/l	0.012	<0.01
Lead	mg/l	<0.0002	<0.005
Nickel	mg/l	0.0065	<0.01
Zinc	mg/l	0.041	<0.01
Ammonia as N	mg/l	<0.1	22

\*Note: Flow is based on continuous  
flow meter readings from the  
Town's flow recorders.

**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 1	Sample 1	Sample 1	Sample 1	Sample 2	Sample 2	Sample 2
	WWTF	WWTF	WWTF	WWTF	WWTF	WWTF	WWTF
	Influent	Influent	Influent	Influent	Effluent	Effluent	Effluent
<b>Date Collected</b>	<b>08/10/21</b>	<b>05/05/21</b>	<b>01/26/21</b>	<b>11/16/20</b>	<b>08/10/21</b>	<b>05/05/21</b>	<b>01/26/21</b>
<b>PARAMETERS</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>
Ph	7.1	6.4	7.1	7.9	7.2	7.2	7.2
BOD (mg/l)							
COD (mg/l)							
CBOD (mg/l)	120	180	180	200	ND (3)	ND (6)	ND (6)
TSS (mg/l)	58	140	140	170	ND (5)	9.5	ND (5)
O&G by HEM (mg/l)	21	35	36	35	ND (5)	ND (5)	ND (5)
TPH by SGTHEM (mg/l)							
Ammonia as Nitrogen (mg/l)	29	23	28	39	7.4	23	18.0
TOTAL Cyanide (mg/l)	ND (0.02)	ND (0.02)	0.024	0.026	ND (0.02)	ND (0.02)	0.02
TOTAL PHENOLS (mg/l)	0.042	ND (0.05)	0.053	0.063	ND (0.015)	ND (0.05)	ND (0.05)
<b>TOTAL METALS (mg/l)</b>							
Aluminum	0.079	0.20	0.180	0.190	ND (0.05)	ND (0.05)	ND (0.05)
Antimony	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Arsenic	0.0016	0.0011	ND (0.001)	0.0014	0.0017	ND (0.001)	ND (0.001)
Barium		0.053		0.031		0.020	
Beryllium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Cadmium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Chromium	ND (0.001)	0.0015	0.0019	0.0010	ND (0.001)	ND (0.001)	ND (0.001)
Copper	0.028	0.035	0.037	0.052	0.0062	0.0076	0.0083
Lead	ND (0.001)	0.001	0.0014	0.0017	ND (0.001)	ND (0.001)	ND (0.001)
Mercury	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Molybdenum	ND (0.001)	0.0011	ND (0.001)	ND (0.001)	0.0020	0.0030	ND (0.0001)
Nickel	0.0032	0.0036	0.0036	0.0035	0.0038	0.0037	0.0041
Silver	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Selenium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Thallium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Zinc	0.075	0.10	0.089	0.12	0.018	0.032	0.04

**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 2	Sample 3	Sample 3	Sample 3	Sample 3	Sample 4	Sample 4
	WWTF	Londonderry	Londonderry	Londonderry	Londonderry	Parkland	Parkland
	Effluent	Influent	Influent	Influent	Influent	Effluent	Effluent
<b>Date Collected</b>	<b>11/16/20</b>	<b>08/10/21</b>	<b>05/05/21</b>	<b>01/26/21</b>	<b>11/16/20</b>	<b>05/05/21</b>	<b>11/16/20</b>
<b>PARAMETERS</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q2</b>	<b>Q4</b>
Ph	7.2	5.7	6.9	6.8	6.8	7.5	8.2
BOD (mg/l)							
COD (mg/l)							
CBOD (mg/l)	ND (6)	710	250	470	390	140	220
TSS (mg/l)	ND (5)	130	110	220	190	92	180
O&G by HEM (mg/l)	ND (5)	48	50	57	91	21	15
TPH by SGTHEM (mg/l)							
Ammonia as Nitrogen (mg/l)	16	36	25	32	27	14	17
TOTAL Cyanide (mg/l)	0.020	0.051	ND (0.02)	0.045	0.26	0.020	0.087
TOTAL PHENOLS (mg/l)	ND (0.05)	0.174	0.051	0.110	0.080		
<b>TOTAL METALS (mg/l)</b>							
Aluminum	ND (0.05)	0.24	0.20	0.40	0.54	0.16	0.25
Antimony	ND (0.001)	ND (0.001)	ND (0.001)	0.0022	ND (0.001)		
Arsenic	0.0012	0.0013	ND (0.001)	0.0011	0.0011	ND (0.001)	ND (0.001)
Barium	0.012		0.032		0.026	0.034	0.025
Beryllium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
Cadmium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Chromium	ND (0.001)	0.0036	0.0012	0.0098	0.0034	ND (0.001)	0.0026
Copper	0.013	0.034	0.024	0.056	0.034	0.040	0.067
Lead	ND (0.001)	ND (0.001)	ND (0.001)	0.002	0.0015	ND (0.001)	0.0012
Mercury	ND (0.0002)	0.00042	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Molybdenum	0.0010	ND (0.001)	ND (0.001)	0.0011	ND (0.001)	0.054	ND (0.001)
Nickel	0.0043	0.005	0.0028	0.0059	0.0043	0.0030	0.0055
Silver	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Selenium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
Thallium	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)		
Zinc	0.044	0.12	0.33	0.17	2.5	0.055	0.16



**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 5	Sample 5	Sample 5	Sample 5	Sample 6
	Car Wash	Car Wash	Car Wash	Car Wash	Kelsen Brewery
	Effluent	Effluent	Effluent	Effluent	Effluent
<b>Date Collected</b>	<b>08/10/21</b>	<b>05/05/21</b>	<b>01/26/21</b>	<b>11/16/20</b>	<b>08/10/21</b>
<b>PARAMETERS</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>
Ph	6.7	9.1	7.2	8.2	6.5
BOD (mg/l)					2600
COD (mg/l)					
CBOD (mg/l)					
TSS (mg/l)	2000	96	81	67	250
O&G by HEM (mg/l)	35	26	22	31	130
TPH by SGTHEM (mg/l)					
Ammonia as Nitrogen (mg/l)					
TOTAL Cyanide (mg/l)					
TOTAL PHENOLS (mg/l)					
<b>TOTAL METALS (mg/l)</b>					
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Chromium					
Copper					
Lead					
Mercury					
Molybdenum					
Nickel					
Silver					
Selenium					
Thallium					
Zinc					

**DERRY, NH IPP SAMPLING  
PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 6	Sample 6	Sample 6	Sample 7
	Kelsen Brewery	Kelsen Brewery	Kelsen Brewery	Rockingham Brewery
	Effluent	Effluent	Effluent	Effluent
Date Collected	05/05/21	01/26/21	11/16/20	08/10/21
PARAMETERS	Q2	Q1	Q4	Q3
Ph	7.2	6.5	9.9	5.5
BOD (mg/l)	2400	>240	950	1400
COD (mg/l)				
CBOD (mg/l)				
TSS (mg/l)	1400	8.5	150	7.5
O&G by HEM (mg/l)	17	5.4	120	14
TPH by SGTHEM (mg/l)				
Ammonia as Nitrogen (mg/l)				
TOTAL Cyanide (mg/l)				
TOTAL PHENOLS (mg/l)				
TOTAL METALS (mg/l)				
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Silver				
Selenium				
Thallium				
Zinc				

**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 7	Sample 7	Sample 7	Sample 8	Sample 8
	Rockingham Brewery	Rockingham Brewery	Rockingham Brewery	From The Barrel	From The Barrel
	Effluent	Effluent	Effluent	Effluent	Effluent
<b>Date Collected</b>	<b>05/05/21</b>	<b>01/26/21</b>	<b>11/18/20</b>	<b>08/24/21</b>	<b>05/05/21</b>
<b>PARAMETERS</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>
Ph	9.8	9.8	8.3	9.1	10.1
BOD (mg/l)	6000	>240	910	<600	ND (360)
COD (mg/l)					
CBOD (mg/l)					
TSS (mg/l)	700	6	7	14	11
O&G by HEM (mg/l)	80	ND (5)	ND (5)	18.0	ND (5)
TPH by SGTHEM (mg/l)					
Ammonia as Nitrogen (mg/l)					
TOTAL Cyanide (mg/l)					
TOTAL PHENOLS (mg/l)					
<b>TOTAL METALS (mg/l)</b>					
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Chromium					
Copper					
Lead					
Mercury					
Molybdenum					
Nickel					
Silver					
Selenium					
Thallium					
Zinc					

**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 8	Sample 8	Sample 9-Distil	Sample 9-Distil	Sample 9-Distil/Brew
	From The Barrel	From The Barrel	Doire Distillery	Doire Distillery	Doire Distillery
	Effluent	Effluent	Effluent	Effluent	Effluent
<b>Date Collected</b>	<b>01/26/21</b>	<b>11/18/20</b>	<b>08/04/21</b>		<b>11/18/20</b>
<b>PARAMETERS</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>		<b>Q4</b>
Ph	10.4	3.8	5.1		3.7/5.8
BOD (mg/l)	130	190	37000		31000
COD (mg/l)					
CBOD (mg/l)					
TSS (mg/l)	25	5.5	80		2900
O&G by HEM (mg/l)	10.0	ND (5)	ND (5)		29.0
TPH by SGTHEM (mg/l)					
Ammonia as Nitrogen (mg/l)					
TOTAL Cyanide (mg/l)					
TOTAL PHENOLS (mg/l)					
<b>TOTAL METALS (mg/l)</b>					
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Chromium					
Copper					
Lead					
Mercury					
Molybdenum					
Nickel					
Silver					
Selenium					
Thallium					
Zinc					



**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 9-Distil	Sample 9b-Beer	Sample 9b-Beer	Sample 10	Sample 10	Sample 10
	Doire Distillery	Daydream Brewing	Daydream Brewing	Sanmina	Sanmina	Sanmina
	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Date Collected	01/26/21	08/10/21	05/06/21	08/10/21	05/07/21	01/26/21
PARAMETERS	Q1	Q3	Q2	Q3	Q2	Q1
Ph	3.8	7.2	5.8	7.9	8.5	7.9
BOD (mg/l)	15000	>7420	4800			
COD (mg/l)						
CBOD (mg/l)						
TSS (mg/l)	18	2500	1400			
O&G by HEM (mg/l)	ND (5)	150	70			
TPH by SGTHEM (mg/l)						
Ammonia as Nitrogen (mg/l)						
TOTAL Cyanide (mg/l)						
TOTAL PHENOLS (mg/l)						
TOTAL METALS (mg/l)						
Aluminum						
Antimony						
Arsenic				0.019	0.019	0.016
Barium						
Beryllium						
Cadmium						
Chromium						
Copper				0.020	0.039	0.003
Lead				ND (0.001)	ND (0.001)	ND (0.001)
Mercury						
Molybdenum						
Nickel				0.014	0.017	0.013
Silver						
Selenium						
Thallium						
Zinc				ND (0.005)	ND (0.005)	0.0055

**DERRY, NH IPP SAMPLING****PROGRAM - 9/1/2020 to 8/31/2021**

	Sample 10	Sample 11	Sample 11	Sample 12	Sample 12
	Sanmina	Liquid Blue	Liquid Blue	Tri-K	Tri-K
	Effluent	Effluent	Effluent	Effluent	Effluent
<b>Date Collected</b>	<b>11/16/20</b>	<b>05/05/21</b>	<b>11/16/20</b>	<b>05/05/21</b>	<b>11/16/20</b>
<b>PARAMETERS</b>	<b>Q4</b>	<b>Q2</b>	<b>Q4</b>	<b>Q2</b>	<b>Q4</b>
Ph	7.9	7.1	7.3	7.4	7.8
BOD (mg/l)		300	170	1700	ND (1200)
COD (mg/l)				3500	750
CBOD (mg/l)					
TSS (mg/l)		9	5.5	470	730
O&G by HEM (mg/l)				26	7.9
TPH by SGTHEM (mg/l)				ND (5)	ND (5)
Ammonia as Nitrogen (mg/l)				47	51
TOTAL Cyanide (mg/l)		0.062	0.077	0.63	0.4
TOTAL PHENOLS (mg/l)				0.51	0.55
<b>TOTAL METALS (mg/l)</b>					
Aluminum				0.77	0.61
Antimony					
Arsenic	0.015				
Barium					
Beryllium					
Cadmium		ND (0.001)	ND (0.001)		
Chromium		ND (0.001)	ND (0.001)	0.017	0.019
Copper	0.024	0.31	0.84		
Lead	ND (0.001)	0.0073	0.0062	0.0015	ND (0.001)
Mercury					
Molybdenum					
Nickel	0.014	0.0025	0.015	0.011	0.017
Silver					
Selenium		0.0022	ND (0.001)		
Thallium					
Zinc	0.0064	0.22	1.6	0.11	0.066